12-2014

Determining Patient Activation Levels among Patients who are Receiving Rehabilitation Services in a Rehabilitation or Long-Term Care Facility

Danielle S. Vittatoe
East Tennessee State University

Determining Patient Activation Levels among Patients who are Receiving Rehabilitation Services in a Rehabilitation or Long-Term Care Facility

By: Danielle Vittatoe

An Honors Thesis submitted in partial fulfillment
of the requirements for the
Honors-In-Discipline Program
East Tennessee States University
December 2014

_____
Signature of Author Date

_____
Signature of HID Mentor Date

_____
Signature of Thesis Reader Date

_____
Signature of Thesis Reader Date

Acknowledgments

I would like to thank my mentor, Dr. Florence Weierbach, for her invaluable time and support throughout this research study. I would also like to thank Mandy Rocker, Assistant Executive Director at John M. Reed Health and Rehabilitation Center, for allowing me to recruit at her facility. I would also like to thank Scott Flemmer, the Director of Nursing at the National Healthcare Corporation in Johnson City for also being gracious enough to allow me to use his facility for my recruitment process. I would like to thank Dr. Yan Cao in the College of Nursing center for Nursing Research for her help in and assistance with data analysis. I appreciate each of you and I could not have completed this study without your guidance and instruction along the way.

Abstract

Research shows that one of the major contributors for an extended stay in a long-term care facility is lack of knowledge regarding goals for rehabilitation after being discharged from an acute care facility. It is important to determine patients' levels of engagement because individuals who are actively involved in discharge planning and rehabilitation goals are able to manage their ongoing care more effectively, which results in increased quality of life. The data was collected using a survey method and the instrument used was the Patient Activation Measure or PAM which is a highly accurate and reliable tool. The 22 question survey was used to determine the level of patient activation among patients who are currently receiving rehabilitation services at a rehabilitation or long-term care facility. Determining the level of engagement in patients receiving rehabilitation services will provide health care providers insight into the how willing patients are to be engaged in their own care. A total of 11 surveys were completed by patients varying age, gender, and length of stay. Each patient was currently receiving rehabilitation services at National Healthcare Corporation of Johnson City or John M. Reed Health and Rehabilitation Facility in Limestone.

Introduction

"Every year, more than 795,000 people in the United States have a stroke" (Stroke Facts, 2014). "Stroke is the leading cause of disability in the United States and almost 40 percent of stroke patients are left with severe disability and functional impairment" (Duncan et al. 2005). "Every year, Americans pay an estimated 38.6 billion dollars for medical expenses due to a stroke" (Stroke Facts, 2014). These costs include health care costs beginning from admission into an acute care facility, to transitioning to an outpatient or inpatient rehabilitation facility or a long-term care facility. "Studies show that improved functional outcomes for patients contribute to patient satisfaction and reduce potential costly long-term care expenditures" (Duncan et al. 2005). "Researchers have found that increased patient adherence to post-acute stroke rehabilitation leads to improved patient outcomes" (Duncan et al. 2005). "Stroke is a significant contributor to disability and the ensuing financial burden affects the individual, family, and state. Improving outcomes from stroke rehabilitation is a national priority and identifying methods of achieving this is a research priority" (Rosewilliam, Roskell, and Pandyan 2011). Along with stroke patients, "hip fractures represent a large and increasing health problem today. A hip fracture constitutes a sudden traumatic event threatening all aspects of the older person's functional status. The rehabilitation of patients with a hip fracture is a transition from initial complete dependency to recovery of optimal functional status" (Olsson, Nyström, Karlsson, and Ekman 2007). Since stroke and hip fracture patients make up a large percentage of patients receiving rehabilitation services, it is especially important to determine their level of patient activation and assess their willingness to be active participants in the recovery process. Patients who participate in their own care are more likely to adopt healthy behaviors which lead to

improved outcomes (van Korff et al. 1997; Bodenheimer et al. 2002a,b; Mosen et al. 2007). This is especially important for chronic diseases, which require patients to play a major role in day-to-day management such as successfully performing activities of daily living.

A Review of the Literature

Importance of patient-centered care to promote patient activation

One of the major contributors for an extended stay in a long-term care facility is due to the lack of involvement regarding rehabilitation goals. "Each patient is entitled to receive information regarding his or her own treatment and rehabilitation. Since stroke patients often require continued and possibly long-term care, goal-setting and decisions regarding treatment is especially significant for stroke patients" (Almborg, Ulander, Thulin, and Berg 2009). Healthcare providers are expected to provide patient-centered care to ensure that each individual patient receives the utmost quality of care. "Patient-centered care is a concept that during recent years has become equivalent with best practiced care" (Edvardsson, Fetherstonhaugh, and Nay 2010). "Patient centeredness is an overall philosophy in which patients have an active involvement in managing healthcare in partnership with service providers who understand and respect their needs" (Rosewilliam et al. 2011). If a patient is not willing to be an active participant in the rehabilitation process, then it is the health care providers' challenge to provide patient-centered care by encouraging their patients to become active and willing participants.

Patient participation and its effects on rehabilitation

Patient participation involves the willingness of the patient to be actively engaged and involved in the care that is provided to them through rehabilitation services. "In a recent study, it was concluded that patients are dissatisfied with the information they receive in connection with

discharge and are rarely involved in planning and goal setting" (Almborg et al. 2009). "Patients also perceived that making progress towards personally meaningful goals had been good for their self-image and helped as a coping mechanism" (Rosewilliam et al. 2011). Evidence demonstrates that patients who are committed and healthcare workers who are actively engaged with patients during the rehabilitation phase will have a more fulfilling and faster recovery. (Horton, Howell, Humby, and Ross 2011)

Conceptual Framework

The nursing meta-paradigm has been adopted by nurses for over a hundred years. There are four essential concepts to the metaparadigm; nurse, patient, health, and environment. All four concepts are able to directly affect the other whether it is in a positive or negative way. All four concepts working together will provide individual health that is above reproach. The concept of patient activation is not solely based on the patient and his or her willingness to participate in their own health care; it is also the nurses' responsibility to ensure that the patient receives the utmost care and the information to do so for themselves. Virginia Henderson said, "nurses' should improve the patient's health, whether it be in terms of assisting the patient in those activities that contribute to health or its recovery, enabling the patient to overcome self-care deficits, or by helping the patient become independent in the activities of daily living" (McMahon 1991). A patient who does not receive adequate information about his or her own disease process, medications, and rehabilitation, will not possess the necessary information needed in order to return to their previous state of independence. The nurse should make certain that the patient is equipped with the information necessary for the patient to independently take part in their own health and ensure they understand the specific steps needed to obtain this goal. The patient should partner with the nurse and health care provider to "seek relevant information,

support, and encouragement which is needed to make informed choices and be involved throughout the entire process" (McMahon 1991). If nurses would provide the patient with the tools necessary to recover from the effects of their disease, he or she will activate her patient who may not have been otherwise engaged in his or her recovery process.

Methodology

The research design used for this study was a cross sectional quantitative study. The Patient Activation Measure was the instrument used to determine how engaged an individual is in his or her own care. "To date, the performance of the PAM has not been tested among at-risk, multi-morbid older adults, who will soon make up a significant proportion of the U.S. population" (Skolasky et al. 2011).

Setting

The participants were recruited from two separate rehabilitation facilities. Participants were recruited from the National Healthcare Corporation of Johnson City and John M. Reed Health and Rehabilitation Center in Limestone. Both facilities offer rehabilitation and skilled nursing services. Prior to data collection, the study was approved by East Tennessee State University's Institutional Review Board (IRB).

Population

The data was collected for analysis using convenience sampling. Participants were asked to participate who were currently receiving rehabilitation services. All patients were given an equal opportunity to participate in the study. There was no discrimination regarding sex. The participants had to be English speaking and also be 18 years old or older. Patients were given the

survey with an informed consent form and a background information form. Each patient who could not fill out a paper and pencil survey were given the option to have the survey administered to them. A total of 11 participants completed the PAM. The population included men and women ranging in age from 50 to 90. The respondents' length of stay in the rehabilitation facility varied from 4 weeks, to 8 weeks or longer. All of the patients who completed a survey were either enrolled in physical therapy, speech therapy, or occupational therapy, or a combination of all three. None of the participants were able to complete a pen and paper survey so all eleven participants requested that the researcher administer the survey to them.

Instrumentation

The data was collected by surveys. The instrument used is a valid and reliable tool called the Patient Activation Measure or PAM (See Appendix A). The demographic tool collects specific information on the participants. The Patient Activation Measure (PAM) assesses people's knowledge, confidence and skills for self-management (Ellins and Coulter 2005). The PAM is comprised of 22 questions which determine the patient's level of activation.The instrument is comprised of 4 factors. The first factor titled "Believes Active Role Important" contains 2 questions which inquires whether the patient believes that his or her role as a patient is important. The second factor titled "Confidence and Knowledge to Take Action" is comprised of 10 questions that determine how knowledgeable he or she is about their current health condition and also determines how confident the patient is with taking control of their own healthcare. The third factor includes 5 questions that determine the patient's readiness to take action. The fourth and final factor contains 4 questions which determine whether or not the patient is able to maintain the course of rehabilitation even during stress. There are 5 answer choices, "Strongly

Agree," "Agree," "Disagree," "Strongly Disagree and "Not Applicable" and each answer choice received a score ranging from 0 to 4. Patients who chose "Not Applicable" received a score of 0. Patients who chose "Strongly Disagree" received a score of 1. By selecting "Disagree," the patient received a score of 2. "Agree" received a score of 3, and "Strongly Agree" received a score of 4. "The PAM has a "theoretical" range from 0 to 100. Higher scores indicate greater activation" (Scholasky et al. 2011). Patients who score lower believe that their role as a patient is not important and they do not have the knowledge or confidence to participate in management of their own care. Scoring in the mid-range of the scale tend to have the necessary knowledge for self-care, but appear to lack some of the skills and confidence needed to carry through on all that is required for effective self-care. Patients scoring at the higher end of the spectrum have the necessary knowledge to manage their own health but may deter during stressful times (Fowles 2009).

Data Analysis

The survey responses were entered into IBM Statistical Product and Service Solutions (SPSS) version 22.0 and was analyzed using descriptive analysis. SPSS was used to calculate Patient Activation levels in this study and the statistical reliability was determined by Cronbach's Alpha (Table 1).

Table 1

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.695	.738	22

Data Results

11 individuals total completed the survey. Out of the 11 participants, 8 were female and 3 were male. Out of all of the participants, 18.2% were between 50 and 60 years of age, 9.1% were between 60 and 70, 27.3% were between 70-85 and 36.4 percent were 86 years of age and older (See Table 3). The overwhelming majority of the participants had been in rehabilitation for 8 weeks or longer at 72.7%. 18.2% had been in rehabilitation for 6 to 8 weeks and 9.1% had been participating in rehabilitation services for 4 to 6 weeks (See Table 2). Although some of the participants were enrolled in more than one rehabilitation service, the vast majority of the participants were enrolled in physical therapy (See Table 4). The data analysis showed that 63.6 percent of the participants scored a level 4 which is a patient activation score between 55.2 and 67.0. The remaining participants, 36.4%, scored a level three which is a PAM score between 47.1 and 55.1 (See Table 5).

Table 2

Length of stay

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4 weeks - 6 weeks	1	9.1	9.1	9.1
	6 weeks - 8 weeks	2	18.2	18.2	27.3
	8 weeks or longer	8	72.7	72.7	100.0
	Total	11	100.0	100.0	

Table 3

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	50-60	2	18.2	18.2	18.2
	60-70	1	9.1	9.1	27.3
	70-85	3	27.3	27.3	54.5
	86 and older	4	36.4	36.4	90.9
	Total	11	100.0	100.0	

Table 4

Rehabilitation

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Physical Therapy	8	72.7	72.7	72.7
	Speech Therapy	1	9.1	9.1	81.8
	Physical Therapy and Speech Therapy	1	9.1	9.1	90.9
	Physical Therapy, Occupational Therapy, and Speech Therapy	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

Table 5

Activation Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	PAM Score 47.1-55.1	4	36.4	36.4	36.4
	PAM Score 55.2-67.0	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

Discussion

Overall, the patient activation levels of the participants were level's 3 and 4 based on the analysis of the PAM. With 36.4% of the participants scoring a level 3, those participants are able to, "take action including maintaining lifestyle changes, knowing how to prevent further problems, and handling symptoms on one's own" (Hibbard, Stockard, and Tusler 2004). 63.6% of participants scored a level 4 on the PAM which means that they believe they can, "handle problems on their own at home, maintain lifestyle changes when under stress, and can keep their health problems from interfering with their life" (Hibbard, Stockard, and Tusler 2004). The findings show that the participants were overall confident in engaging and managing their own healthcare. They believe that they have an important role and want to be actively involved in their rehabilitation process. The findings show that the majority of the participants believe that they are able to manage their own symptoms even at home, but may regress or deter in times of stress.

Limitations

There were several limitations in this study including the population itself, the population size, and the instrument itself. The population itself was primarily comprised of individuals who were 70 or older and had hearing and vision deficits. This resulted in the all 11 surveys being

administered to the participants by the researcher per request of each of the participants. By doing so, this resulted in the data collection process and recruitment process to be more time consuming than expected. Another limitation to the study is that the majority of residents in the nursing facility were not enrolled in rehabilitation therapy which caused the target population to be significantly less than expected. The decreased sample size resulted in the p-value >0.05 which decreased the significance and reliability of the study. The small sample size also resulted in a Cronbach's Alpha of .695. The Cronbach's Alpha based on standardized items is .738 causing the PAM to be an adequately reliable tool. The largest limitation of this study was the length and wording of the patient activation measure. It was found to be too long in length and difficult to fully comprehend by the participant, which resulted in a prolong time of administration of the instrument due to the need to repeat multiple questions.

Future Research

In future research, the PAM-13, which is a short form of the PAM-22, could be used for populations whose are 70 and older. This shorter form may be less confusing and less time consuming for the population which may result in an increase in sample size which would increase the validity and reliability of the study.

Conclusion

In conclusion, patients who are actively involved in their own treatments and healthcare are more likely to maintain their health condition and prevent further complications from occurring. This results in patient who may have a longer recovery period and the possibility of regression compared to patients who are actively engaged in their own care. If nurses would provide the patient with the tools necessary to recover from the effects of their disease, he or she

will activate her patient who may not have been otherwise engaged in his or her recovery process.

References

Almborg, A. H., Ulander, K., Thulin, A., & Berg, S. (2009). Patients' perceptions of their participation in discharge planning after acute stroke. *Journal of clinical nursing*, *18*(2), 199-209.

Duncan, P., Zorowitz, R., Bates, B., Choi, J.Y., Glasberg, G., Graham, D., Katz, R.C., Lamberty, K., & Reker, D. AHA/ASA-Endorsed Practice Guidelines: Management of Adult Stroke Rehabilitation Care: A Clinical Practice Guideline. Stroke. 2005;36:e100-e143

Edvardsson, D., Fetherstonhaugh, D. and Nay, R. (2010), Promoting a continuation of self and normality: person-centred care as described by people with dementia, their family members and aged care staff. *Journal of Clinical Nursing*, 19: 2611–2618

Ellins, J., & Coulter, A. (2005). How engaged are people in their health care. Findings of a national telephone survey. London.

Fowles, J. B., Terry, P., Xi, M., Hibbard, J., Bloom, C. T., & Harvey, L. (2009). Measuring self-management of patients' and employees' health: further validation of the Patient Activation Measure (PAM) based on its relation to employee characteristics. *Patient education and counseling*, *77*(1), 116-122.

Horton, S., Howell, A., Humby, K., & Ross, A. (2011). Engagement and learning: an exploratory study of situated practice in multi-disciplinary stroke rehabilitation. *Disability and rehabilitation*, *33*(3), 270-279.

Hibbard, J. H., Stockard, J., Mahoney, E. R., & Tusler, M. (2004). Development of the Patient Activation Measure (PAM): conceptualizing and measuring activation in patients and consumers. *Health services research*, *39*(4p1), 1005-1026.

Lubetkin, E. I., Lu, W. H., & Gold, M. R. (2010). Levels and correlates of patient activation in health center settings: building strategies for improving health outcomes. *Journal of health care for the poor and underserved*, *21*(3), 796-808.

McMahon, R. (1991). Therapeutic nursing: theory, issues and practice. *Nursing as therapy*, 1-25.

Olsson, L. E., Nyström, A. E., Karlsson, J., & Ekman, I. (2007). Admitted with a hip fracture: patient perceptions of rehabilitation. *Journal of Clinical Nursing*,*16*(5), 853-859.

Rosewilliam, S., Roskell, C. A., & Pandyan, A. D. (2011). A systematic review and synthesis of the quantitative and qualitative evidence behind patient-centred goal setting in stroke rehabilitation. *Clinical Rehabilitation*, *25*(6), 501-514.

"Stroke Facts." *Centers for Disease Control and Prevention"*. Centers for Disease Control and Prevention, 10 Dec. 2013. Web. 20 Jan. 2014.

Skolasky, R. L., Green, A. F., Scharfstein, D., Boult, C., Reider, L. and Wegener, S. T. (2011), Psychometric Properties of the Patient Activation Measure among Multimorbid Older Adults. Health Services Research, 46: 457–478. doi: 10.1111/j.1475-6773.2010.01210.x

Van Korff, M., J. Gruman, J. Schaefer, S. J. Curry, and E. H. Wagner. 1997. ‘‘Collaborative Management of Chronic Illness.’’ *Annals of Internal Medicine* 127 (12): 143–9.

Appendix A

Patient Activation Measure

	Strongly Agree	Agree	Disagree	Strongly Disagree	Not Applicable
Believes Active Role Important					
1. When all is said and done, I am the person who is responsible for managing my health condition.					
2. Taking an active role in my own health is the most important factor in determining my health and ability to function.					
Confidence and Knowledge to Take Action					
3. I know what each of my prescribed medications do.					
4. I am confident I can tell my health care provider concerns I have even when he or she does not ask.					
5. I am confident that I can tell when I need to go get medical care and when I can handle a health problem myself.					
6. I know the lifestyle changes like diet and exercise that are recommended for my health condition.					
7. I am confident that I can follow through on medical treatments I need to do at home.					
8. I am confident I can take actions that will help prevent or minimize some symptoms or problems associated with my health condition.					
9. I am confident that I can find trustworthy sources of information					

about my health condition and my health choices.					
10. I am confident that I can follow through on medical recommendations my health care provider makes such as changing my diet or doing regular exercise.					
11. I understand the nature and causes of my health condition(s).					
12. I know the different medical treatment options available for my health conditions.					
Taking Action					
13. I have been able to maintain the lifestyle changes for my health that I have made.					
14. I know how to prevent further problems with my health condition.					
15. I know about self-treatments for my health condition.					
16. I have made the changes in lifestyle like diet and exercise that are recommended for my health condition.					
17. I am confident I can figure out solutions when new situations or problems arise with my health condition.					
18. I am able to handle symptoms of my health condition on my own at home.					
Staying the Course Under Stress					

19. I am confident that I can maintain lifestyle changes like diet and exercise even during times of stress.					
20. I am able to handle problems of my health condition on my own at home.					
21. I am confident that I can keep my health problems from interfering with the things I want to do.					
22. Maintaining the lifestyle changes that are recommended for my health condition is too hard to do on a daily basis.					

Activation level 1: PAM score ≤ 47.0

Activation level 2: PAM score 47.1 to 55.1

Activation level 3: PAM score 55.2 to 67.0

Activation level 4: PAM score ≥ 67.1

Appendix B

Demographic Data

Age: ☐ 18-30

☐ 31-50

☐ 51-60

☐ 61-70

☐ 71-85

☐ 86 and older

☐ Male ☐ Female

What Rehabilitation Services are you receiving?

☐ Physical Therapy ☐ Occupational Therapy ☐ Speech Therapy

How long have you been at NHC?

☐ 1 day - 1 week ☐ 1 week – 3 weeks ☐ 3 weeks – 4 weeks ☐ 4 weeks – 6 weeks

☐ 6 weeks – 8 weeks ☐ 8 weeks or longer

Appendix C

When all is said and done, I am the person who is responsible for managing my health condition

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	27.3	27.3	27.3
	Agree	6	54.5	54.5	81.8
	Strongly Agree	2	18.2	18.2	100.0
	Total	11	100.0	100.0	

Taking an active role in my own health is the most important factor in determining my health and ability to function.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	1	9.1	9.1	9.1
	Agree	8	72.7	72.7	81.8
	Strongly Agree	2	18.2	18.2	100.0
	Total	11	100.0	100.0	

I know what each of my prescribed medications do.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Not Applicable	1	9.1	9.1	9.1
	Strongly Agree	1	9.1	9.1	18.2
	Disagree	5	45.5	45.5	63.6
	Agree	4	36.4	36.4	100.0
	Total	11	100.0	100.0	

I am confident I can tell my health care provider concerns I have even when he or she does not ask.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	9.1	9.1	9.1
	Agree	9	81.8	81.8	90.9
	Strongly Agree	1	9.1	9.1	100.0

	Total	11	100.0	100.0	

I am confident that I can tell when I need to go get medical care and when I can handle a health problem myself.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	18.2	18.2	18.2
	Agree	7	63.6	63.6	81.8
	Strongly Agree	2	18.2	18.2	100.0
	Total	11	100.0	100.0	

I know the lifestyle changes like diet and exercise that are recommended for my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	9.1	9.1	9.1
	Agree	8	72.7	72.7	81.8
	Strongly Agree	1	9.1	9.1	90.9
	6	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

I am confident that I can follow through on medical treatments I need to do at home.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	6	54.5	54.5	54.5
	Agree	5	45.5	45.5	100.0
	Total	11	100.0	100.0	

I am confident I can take actions that will help prevent or minimize some symptoms or problems associated with my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	63.6	63.6	63.6
	Agree	4	36.4	36.4	100.0

	Total	11	100.0	100.0	

I am confident that I can find trustworthy sources of information about my health condition and my health choices.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	9.1	9.1	9.1
	Agree	10	90.9	90.9	100.0
	Total	11	100.0	100.0	

I am confident that I can follow through on medical recommendations my health care provider makes such as changing my diet or doing regular exercise.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	9.1	9.1	9.1
	Agree	10	90.9	90.9	100.0
	Total	11	100.0	100.0	

I understand the nature and causes of my health condition(s).

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	27.3	27.3	27.3
	Agree	7	63.6	63.6	90.9
	Strongly Agree	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

I know the different medical treatment options available for my health conditions.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	36.4	36.4	36.4
	Agree	6	54.5	54.5	90.9
	Strongly Disagree	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

I have been able to maintain the lifestyle changes for my health that I have made.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	36.4	36.4	36.4
	Agree	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

I know how to prevent further problems with my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	36.4	36.4	36.4
	Agree	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

I know about self-treatments for my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	3	27.3	27.3	27.3
	Agree	8	72.7	72.7	100.0
	Total	11	100.0	100.0	

I have made the changes in lifestyle like diet and exercise that are recommended for my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	1	9.1	9.1	9.1
	Agree	10	90.9	90.9	100.0
	Total	11	100.0	100.0	

I am confident I can figure out solutions when new situations or problems arise with my health condition.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	5	45.5	45.5	45.5
	Agree	5	45.5	45.5	90.9
	Strongly Agree	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

I am able to handle symptoms of my health condition on my own at home.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	63.6	63.6	63.6
	Agree	4	36.4	36.4	100.0
	Total	11	100.0	100.0	

I am confident that I can maintain lifestyle changes like diet and exercise even during times of stress.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	2	18.2	18.2	18.2
	Agree	9	81.8	81.8	100.0
	Total	11	100.0	100.0	

I am able to handle problems of my health condition on my own at home.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	7	63.6	63.6	63.6
	Agree	4	36.4	36.4	100.0
	Total	11	100.0	100.0	

I am confident that I can keep my health problems from interfering with the things I want to do.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Disagree	4	36.4	36.4	36.4
	Agree	7	63.6	63.6	100.0
	Total	11	100.0	100.0	

Maintaining the lifestyle changes that are recommended for my health condition is too hard to do on a daily basis.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly Disagree	10	90.9	90.9	90.9
	Disagree	1	9.1	9.1	100.0
	Total	11	100.0	100.0	

East Tennessee State University
Office for the Protection of Human Research Subjects Box 70565 Johnson City, Tennessee 37614-1707
Phone: (423) 439-6053 Fax: (423) 439-6060

IRB APPROVAL – Initial Exempt

July 7, 2014

Danielle Vittatoe

RE: Determining the level of patient engagement among patients who are receiving rehabilitation services after an acute hospitalization.
IRB#: 0614.17e
ORSPA#: ,

On **July 7, 2014**, an exempt approval was granted in accordance with 45 CFR 46. 101(b)(2). It is understood this project will be conducted in full accordance with all applicable sections of the IRB Policies. No continuing review is required. The exempt approval will be reported to the convened board on the next agenda.

 New Exempt submission, NHC Letter of Support, Patient Activation Measure, Background Information, Flyer, Questionnaire, Phone script, Short Form ICD, CV, Final Prospectus

Projects involving Mountain States Health Alliance must also be approved by MSHA following IRB approval prior to initiating the study.

Unanticipated Problems Involving Risks to Subjects or Others must be reported to the IRB (and VA R&D if applicable) within 10 working days.

Proposed changes in approved research cannot be initiated without IRB review and approval. The only exception to this rule is that a change can be made prior to IRB approval when necessary to eliminate apparent immediate hazards to the research

subjects [21 CFR 56.108 (a)(4)]. In such a case, the IRB must be promptly informed of the change following its implementation (within 10 working days) on Form 109 (www.etsu.edu/irb). The IRB will review the change to determine that it is consistent with ensuring the subject's continued welfare.

Sincerely,

Accredited Since December 2005

George Youngberg, M.D., Chair
ETSU/VA Medical IRB
Cc: